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OIL WORLD

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CALIFORNIA
OIL WORLD
and Petroleum Industry

DECEMBER 17, 1936
VOLUME XXIX
NUMBER 22
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THE WORLD'S FIRST OIL TRADE PUBLICATION

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Coming Events

Dec. 17—Southern California Meter Association, regular meeting, Van Matre Inn, 2563 Clarendon Ave., Huntington Park.

Dec. 18—Official date for annual Christmas Jinks of Calif. Oil & Gas Assn. Wildcat Committee. The place, Biltmore Hotel, L. A. The Wildcats promise better and funnier entertainment than ever, including an original play.

Jan. 11-15—American Road Builders' Assn., Highway Exhibit and Convention, New Orleans.

Jan. 11-15—Society of Automotive Engineers, Book-Cadillac Hotel, Detroit, Mich.

Jan. 12—Meeting of the Basin Chapter, A.P.I.

Jan. 12—Mining & Metallurgical Society of America, New York.

Jan. 16-24—First International Consumers Petroleum Exposition, Convention Hall, Detroit, Mich.

March 17-19—American Association of Petroleum Geologists, 22nd Annual Convention, Biltmore Hotel, Los Angeles.

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Announcement

FOR NEARLY THIRTY YEARS, the California Oil World has been responsive to the wishes of its subscribers. Because the California Oil World has bent every effort to furnish them with the kind of material they need and want, it has always had an effortless and almost automatic yearly renewal of subscriptions, and it has always known that it was filling its mission in life because of the very fact that those whom it was endeavoring to serve, its readers and the California oil industry in general, were giving it their continued support.

As progress is made, and as conditions change, the needs and desires of people change. The California Oil World has had numerous requests to publish timely engineering and technical articles, without sacrificing its always complete coverage of the news and development activities of the industry.

As has always been the case, California Oil World is going to comply with the needs of its subscribers.

California Oil World, with the issue of January 5th, 1937, will become a semi-monthly. Issuance as a semi-monthly was decided upon as the ideal type of publication after a careful investigation among men in the oil industry had shown it to be the one kind of publication that could not only present technical and engineering articles of interest, but could also publish live news articles. The California Oil World will publish authoritative articles written by men in the industry, covering all its varied branches, from the well to the gasoline pump. It will include mention of the men in the oil industry's news. It will be profusely illustrated. It will, as it has for nearly thirty years, continue to publish the news of the industry's production, refining, marketing, natural gas, and natural gasoline activities.

The semi-monthly California Oil World will lose none of the features that make today's California Oil World a worthy heir to its tradition of thirty years' service to the California oil industry. The semi-monthly California Oil World will add to the present California Oil World just those things that the California oil industry has requested, without losing, as any other schedule of publication would have, those features that have made the California Oil World a permanent institution in the California oil industry.

With the issue of January 5th, 1937, the publishers of the California Oil World will present the first of its semi-monthly issues—the answer to the needs of the California oil industry—a complete publication, its policy chosen and determined by the industry itself.

CALIFORNIA
OIL WORLD
and Petroleum Industry

A MATTER WHICH may be of considerable interest to the oil industry is developing among farmers and agricultural interests in the state.

The farmers met last week at Pasadena, and heard a description of the way European cooperative buying groups operate—and, to the greater or lesser dismay of the oil companies marketing in the Pacific Northwest, these cooperative groups have already made their influence felt.

Briefly, the scheme is this: The farmers cooperate in buying all their requirements, and hire, in a general sense, one purchasing agent to make all the purchases. This purchasing agent, or representative of the group, wields considerable power as the natural consequence of buying for so many people. In other words, he buys in wholesale lots, as against the retail lots of the individual farmer, and sells to the farmer at cost, plus only enough profit to pay the overhead of the cooperative organization. The farmer is thereby benefitted to the extent that he is buying on a wholesale cost basis, rather than a retail cost basis.

In the Northwest—and in the Mid-Western states, where the movement is much farther advanced than on the Pacific Coast—the effect of this cooperative buying is already being felt. Gasoline and fuel oil, as well as other petroleum products, are being bought through cooperatives. The result is that instead of having several dozen individual farmer customers and prospective customers, the oil company has one customer only, and that customer is buying principally on a price basis. This condition actually exists in a few communities on the Pacific Coast.

The price basis, really, is the only basis on which the purchaser can buy. He is going to get good service from any oil company. He is going to get good products from any company. He knows that X gasoline and oil will operate in the cars and tractors and other machinery of his farmer members just about, if not equally, as well as Y gasoline and oil. He therefore is interested only in whether he can buy X gasoline cheaper, or whether Y company, in an effort to get the business, will quote him a slightly lower price. Chances are, sooner or later, that Y company, or Z company, or some other company, will quote him a price at half a cent under the regular market price of gasoline, and get the business. There will then be a continuous fight on the part of the other companies to regain, or usurp, that business, and if history repeats itself, as it is rumored to have a habit of doing, there is a gasoline price war on hand.

At first glance, there is but one thing that the oil companies can do, and that is to post a gasoline price, and stick to it. If that is done, the oil company with the best sales force, and with the best story to tell the farmers' purchasing agent, will get the business.

But, for some reason, we have a feeling that this plan will not be followed out. We think that history will repeat, and the greater number of farmers' cooperatives there are, the greater the number of cuts there will be in the price of gasoline—just to get the farmers' business.

There have been one or two other interesting developments at the farmers' meeting, in addition to the fact that the present administration at Washington has been on hand, through its representatives, to take all the credit for the farmer's lot today being a happier one than it was a year ago, or two years ago.

Whether the administration is responsible or not, the farmer considers his lot happier than it has been in the recent past. In that there is some cheer for the oil industry. The most noticeable effect of the farmer's increased prosperity has been the decrease in the din for developing new uses for farm products, in which has recently been included considerable agitation for alcohol-gasoline blends as compulsory motor fuel.

The development of new uses for farm products, and the growing of new crops for the sole purpose of selling them to industry to utilize in various manufacturing processes, is not in itself harmful. In fact, it is highly commendable, and it may prove to be very fortunate in the future if the farmer completely drops the idea at this time. But when the farmer, through the unquestioned political influence he now has, attempts to MAKE the nation consume his products in a way that is demonstrably unsound both technically and economically, that is another matter.

It was the latter condition which applied to the alcohol-gasoline blend propaganda and the plans of the farmers in connection therewith. It was the latter condition which the oil industry condemned, and which any other industry, and any logical-minded person would have condemned.

It is a matter of satisfaction therefore, to note that increased prosperity for the farmer, even though that prosperity has not reached the heights to which the farmer thinks he is entitled, has reduced the agitation for, among other things, alcohol-gasoline blends.

Another matter that may be of interest to the oil industry is that the farmers, through their cooperative buying groups, are seriously considering an attempt to get special consideration on truck taxes and fees when these trucks are being used in conjunction with these groups.

The direct effect of this, if the farm groups are able to make it a fact, on the oil industry will probably be small, except that it will mean that one group of the population is receiving benefits at the expense of the other. Conceivably, if the proposal succeeds and covers enough ground, taxes on other truck units will have to be raised to make up for the loss of revenue from farmers' trucks. If that is the case, there will be a decided effect upon the oil industry, as well as upon every other industrial user of trucks.

Compact Expiration, End Texas Proration Law, Giving U. S. Oil Industry Concern

NEXT September the Interstate Oil Compact will expire. Congress will be asked to sanction its renewal and the question will come up at this winter's session, which opens right after Jan. 1. Opposition to the renewal may be expected from Secretary Ickes who has again and again expressed his contempt for the Compact and has declared that federal control is the only possible solution of what he and his followers consider the vital problems of the industry. He will almost certainly seek legislation to replace the Compact by something more to his liking.

Such word as comes from the meeting held at Oklahoma City the first week of this month indicates that, on the other hand, the Compact will almost certainly be strengthened at the January meeting of the legislatures of Pennsylvania, Indiana and Michigan. These states are expected to ratify the Compact. Such action will make the industry east of California unanimous, with the exception of Louisiana, as far as legislative action can make it so. Louisiana is not expected to join in the movement. Texas, Oklahoma, Kansas, Arkansas, Illinois, New Mexico, Wyoming and Montana are all members. Owing to the fear that it may be the only alternative to whatever form of Federal control Secretary Ickes wants, there may be an effort to get the California Legislature to ratify the Compact, but it is admitted generally that the prospects of success are slight. Unless thoroughly convinced that such action is demanded by the situation, it is very doubtful if the industry will even bring the matter before the Legislature.

Texas Law Expires

Another matter which disturbs the peace of the advocates of the Compact, and quite a few others in the Mid-Continent area, is that fact that the statute under which proration is enforced in Texas expires by limitation in June, 1937, unless extended by the Legislature that meets in January. There are signs that opinion is far from unanimous among the members of the Texas oil industry as to the desirability of proration, which bears quite heavily upon any who want to produce more. Their opposition is easily understood, whether one sympathizes with them or not. It may or may not prevent the extension of the law the enforcement of which was accomplished only after a hard fight.

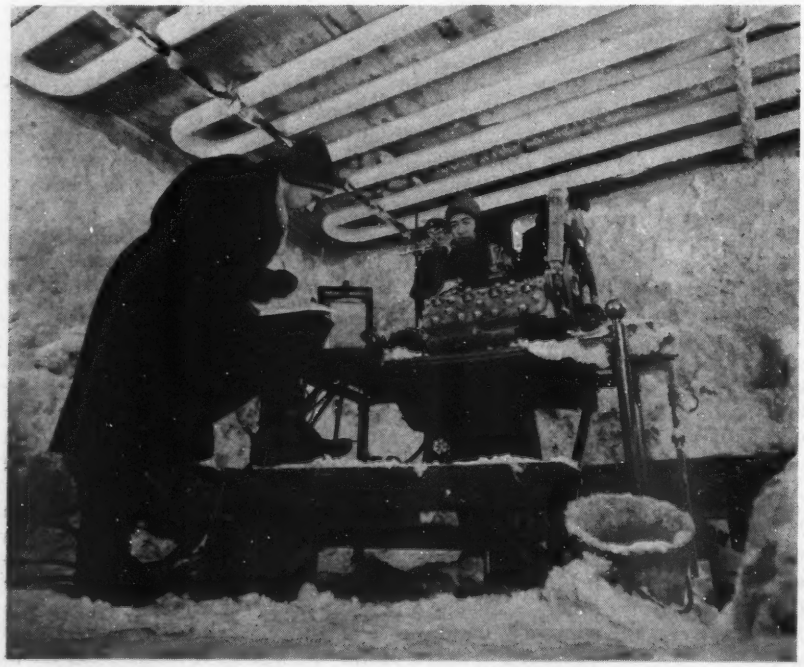
Texas Proration

Texas had a total of 66,765 producing wells on Oct. 31, the date of the last official state report available. Their daily average allowable was 17.9 bbls., California's average was 47.3. Of the number of Texas producing wells, stated above, 26,765 were shown by the October report to have been flowing and 39,471 were pumping. California had 12,102 producing wells, of which the Umpire's office reported 483 flowing, 283 on the gas lift, and 11,336 on the pump. California's actual output for October was only 573,542 bbls. per day, while Texas produced more than 1,000,000 bbls. daily, but the Texas operator, who has drilled and brought in wells rated at several thousand barrels daily, but who is forbidden by the state to produce more than 200 bbls. or a great deal less per day, finds no consolation whatever in comparing the grand totals of the two states.

When the Compact was formed, Texas took the ground that no restriction could be imposed except upon physical waste, that the term "waste" should not be construed to include "economic waste", and that the question of the effect upon the prices received for oil or any of its products should not be considered in connection with the fixing of allowables for production. The Compact is restricted in accordance with the stand taken by Texas when it was formed.

California Feared

Mid-Continent and Eastern oil states profess to be worried over the possibilities of California breaking into their markets, and even the limited amounts shipped to the Atlantic Coast monthly serve to give them the jitters. For these reasons they are supremely anxious to get this state into the Compact. Imports worry them greatly and if a way can be found to stop them they will be stopped. So far, however, the influence of the importers and consumers have blocked their efforts to reduce the imports of foreign oil below the present figures. However, it is admitted on all hands that much has been gained by the restrictions now in effect.



One of the tests by which Union Oil Co. engineers determined the quick-starting power of winter 76 gasoline at near-zero temperatures. A high-compression, V-eight motor was sealed in a refrigerating chamber for the experiments.

Huntington Beach Consults Lawyers As To Oil Titles

By Arthur Richard Hinton

HUNTINGTON BEACH is still determined to fight for a share of any royalties received by the state from tideland wells. It may be that the question of the state's proprietary title to the oil may be raised before the Legislature and even in court. Extreme as this stand may appear there are lawyers who incline to uphold it. The city has consulted a legal firm or group of attorneys upon these points and has asked them to submit a report some time this month. The City Council has already held its December meeting so that the report may be submitted at the January meeting. However, if the questions raised are considered important, a special meeting may be called. The identity of the attorneys consulted has not been revealed.

At the same time the city has given up the effort to overthrow the decision of the District Court of Appeals adverse to its claim to the right to lease a portion of Ocean Blvd. to the Carr Oil Co. for drilling. Adverse decisions in both the Superior and the appellate courts made the outlook for a reversal unlikely, and the Carr Oil Co. declined to join in the appeal to the State Supreme Court, so the matter has been dropped. But the effort to get a share of the tideland revenues is still in the foreground.

Legal Questions Involved

While the majority of legal opinion holds that the state has complete title, in both sovereign and proprietary capacity, to the tidelands and to their oil, such opinion is not unanimous. There are dissenting lawyers, some of whom believe that the title is vested in the United States, others who think that the city has some claims. Foremost among those who favor the United States as the holder of title to tideland oil is Geo. B. Bush of Los Angeles, who appeared for the city in litigation undertaken against the state when the question of tideland drilling came up. Several lawyers who have discussed the subject with Mr. Bush have admitted that the state's position may not be unassailable and that it might crumble before a determined court attack.

Mr. Bush's opinion is based upon a long series of questions dating to the earliest days of the government, to the treaty of Guadalupe Hidalgo by which Mexico ceded California to the United States, and to various court rulings, statutes and constitutional theories bearing upon phases of the problem. True, only recently the General Land Office rejected an application for a tideland permit on the ground that the United States does not claim any title to the tidelands. However, if the question went to court, such a ruling, administrative in character and not judicial, might be overthrown by the U. S. Supreme Court. In such event, Congress alone could adjust the matter between the Federal government and the states.

Incidentally, Mr. Bush was legislative counsel when the original tideland drilling legislation was adopted, and, as such, drew the statute passed and later repealed, under which all present tideland drilling at Elwood and Rincon is being carried on.

Whatever may be the state's proprietary title to the tideland oil, the city of Huntington Beach has certain police powers over any drilling. There are lawyers who hold that it may be possible for the city to use this power in such a way as to get a share of the revenues. The city has jurisdictoin over the tidelands in its police capacity although, as the law is interpreted, no proprietary rights whatever. Several other cities have these proprietary rights. Huntington Beach might have acquired them if the question had been raised when the city was incorporated, and the failure to do so was an oversight due to the fact that then there was no suspicion that oil existed in the vicinity. The city's limits include the ocean water three miles from shore.

Drilling Sites, Beach Protection

While advocates of the state drilling program urged by the Governor take for granted that the state may condemn adjacent lands for drill sites, this position is not universally held to be sound. There are lawyers who dissent therefrom, and quote judicial decisions in which there is a sharp distinction drawn between the state as a sovereign and as a proprietor, and which hold that the state may not condemn land for use in connection with its proprietary operations.

Should the courts finally uphold this contention, the state may face the alternative of beach drilling, already condemned several times by the voters, or of buying or leasing land within the city. Here the city's jurisdiction might be brought into play through building ordinances

(Continued on Page 21)

Group of General Petroleum executives and trophies won in nation-wide safety contest of National Safety Council. Reading from left to right they are: A. H. DeFriest, vice president and general sales manager; E. L. Adams, manager pipeline transportation; Fred Isaacs, manager of refineries; Ray C. Wheeler, manager natural gas department; W. L. McLaine, vice president in charge of production; and A. L. Weil, president of the corporation, who officially presented the awards.

Conservation and Stabilization Synonymous

By V. R. D. Kirkham
Economic Geologist (An I. P. A. Paper)

WEBSTER says in his well known dictionary, "Conservation is a conserving, preserving, guarding or protecting; a keeping in a safe or entire state; preservation." Twentieth Century dictionary says, "Conservation is the act of preserving, guarding, or protecting; preservation from loss, decay, injury or violation; the keeping of a thing in a safe or entire state." Webster has no definition for stabilization but shows it as a synonym for stability. Webster says stabilize means to make stable and stable means "firmly established, not easily moved, shaken or overthrown; fixed steadfast."

Webster says synonymous means "Having the character of a synonym; expressing the same or nearly the same idea."

If we wish to say that by keeping the petroleum industry stable we are keeping that industry safe, or preserving it from loss, decay, injury and violation, then in that sense we can say the two words stabilization and conservation are partially if not wholly synonymous.

Conservation has become a common word in our vocabulary chiefly in connection with national resources. Conversation about conservation of natural resources began to appear around 1901 and became somewhat of an issue by 1908, when need for conservation of our forest resources was argued and debated.

Let us examine our natural resources and see if they are all alike. Should they all be conserved, or should they all be exploited, or should some be conserved and others exploited?

Natural Resources Classified

It appears to me that our natural resources are not all alike and consequently that they fall into several readily recognizable classes. There are those which are unlimited and replaceable. In this class are all things which are grown in crops, including our forest resources. This also includes our air and water resources. Resources of this nature should be exploited.

There are those which are limited and replaceable. Chief of these are our soil, and its necessary plant foods, and water power. These should be exploited under guarded conditions.

There are those which are unlimited and nonreplaceable such as nitrogen, and other elements from the air, salts from the sea, and aluminum from the earth. These should be exploited to the fullest extent.

There are those which are limited and nonreplaceable. This includes all of the minerals not included in the other classes. Chiefest of these are metals used in the industries, and the mineral fuels.

Conservation rather than exploitation needs to be applied to this group only because there can be no replacement within the next few thousand years, or within the needs of this civilization, of any of the deposits of these minerals.

Conservation does not necessarily mean with any of these minerals that any one of them should be saved in its entirety. It means only that our present civilization should become aware of its scarcity or plentitude and should use it more sparingly or properly over the life of the mineral deposit than it would if the extent of that deposit were not known.

Misuse Is Waste

One of the greatest means of waste and loss in an industrial civilization such as ours is the misuse of a mineral. This is where some other mineral or material can be used for the fabrication of merchandise, or the manufacture of power and energy, instead of one which is relatively limited and doomed to early exhaustion, and which has certain specific qualities or characteristics which fit it for certain uses which cannot be met by other minerals so well, or not at all.

Industries using the metals are rapidly realizing that there is a limit to deposits of metal yielding minerals, and we find today in many industrial centers that metal scrap makes up the bulk of the furnace charge where metal merchandise is being fabricated. Brass foundries report that only one ton of raw metal is going into three tons of brass which are being manufactured. In the automotive factories from 65% to 95% of the furnace charge is scrap metal and the rest raw pig iron.

This practice of course, makes far less waste and will help to conserve the supply of raw material for an indefinite time.

In the minerals used for fuel and energy we are of course less fortunate because we have no scrap which can be used over and over, and the tragic aspect of a short life applies even more definitely to the oil and gas industry than it does to the coal industry.

We have enough coal to last us several thousands of years but what of our oil?

Oil Shortage Scares

Much has been said and written about our oil reserves and there have been numerous shortage and exhaustion scares from 1908 up to the present. Although it took the United States forty-four years to produce and use its first billion barrels of oil, it has been able to produce and use a billion barrels per year for the last seven years.

All yearly estimates made by authoritative persons or groups between 1914 and 1925 inclusive have been exceeded by several billion

Ralph Arnold	in 1914 estimated reserve of	5,700,000,000 Bbls.
U. S. G. S.	in 1915 estimated reserve of	7,600,000,000 Bbls.
David White	in 1918 estimated reserve of	6,700,000,000 Bbls.
A. A. P. G.	in 1921 estimated reserve of	9,150,000,000 Bbls.
A. P. I.	in 1925 estimated reserve of	5,300,000,000 Bbls.
L. C. Snyder	in 1935 estimated reserve of	12,000,000,000 Bbls.
V. R. Garfias	in 1935 estimated reserve of	13,000,000,000 Bbls.
U. S. G. S.	in 1935 estimated reserve of	13,000,000,000 Bbls.
Virgil R. D. Kirkham	in 1936 estimated reserve of	14,000,000,000 Bbls.

barrels actual production and by whatever reserve we have in the ground at the present time.

Even though all the early estimates have been exceeded by actual production up to June 1, 1936, in amounts varying from ten billion to fifteen billion barrels, there is no gainsaying the fact that there is a definite limit to our petroleum reserves and the 1935 and 1936 estimates cannot be far wrong.

The geologist of today has available new facts and new theories which certainly were not in the possession of the individuals making the earlier erroneous estimates. Few geologists before 1920 could envision the deeper drilling made possible by increased mechanical efficiency. Horizons now producing from depths of 8000 to 12,000 ft. were not taken into account. Earlier geologists had less elastic ideas about the productivity of certain types of structure. Little was known or suspected about the productivity mountain ridges and buried vaults in our great structural basins.

The productivity of the monoclinal structures of the East Texas type was not taken into account. Earlier geologists had a faulty understanding of actual source conditions and their relations to basins of deposition and reservoir conditions.

Our consumption is now more than a billion barrels per year and if all of our oil could be produced at the present rate, according to my figures, it would be exhausted by 1950. This, however, cannot happen. There is no conceivable way in which this amount of oil could be brought to the surface in that short a period. Approximately 50% of the oil now produced comes as flush production from 2% of the wells. Even our very oldest fields are still yielding some oil. All the wells in Pennsylvania, New York, West Virginia, Ohio, Kentucky and Illinois amount to 168,695 in number and these produced 18,857,000 bbls. of oil in the last six months. Each of these wells produces on the average 111 bbls. in six months by pumping, whereas practically every flowing well will produce that much daily, and each one of thousands of wells in Texas, Kansas, California or Oklahoma will produce from 10,000 to 35,000 bbls. per day if permitted to flow open.

Petroleum Substitutes

Even though it may be impossible for us to produce our fourteen billion barrels of petroleum before the year 2000, a real petroleum shortage will be felt in six years which should begin to be acute in eight years, when petroleum prices will rise to a point where petroleum substitutes can compete with petroleum.

Substitutes will of course be oil from the reduction of oil shale and from the pressure hydrogenation of coal and from reduction of water gas. Each one will be able to prevent actual famine, but will be high priced. Alcohol will be used as a partial substitute for motor fuel but cannot substitute for needed lubricants.

If we were to keep pace with consumption we must discover one billion barrels of new oil per year. For the last five years our rate of discovery has been barely over half a billion per year. The prospects are for a decline under that figure during the next five years.

Those who think that oil reserves are not limited and that there is no need for conservation and careful handling of our present production are deceived by large potentials which are quoted for our large flush fields. Col. E. O. Thompson of Texas, says that the East Texas field can produce 109,000,000 bbls. of oil per day. This potential is no doubt accurate and the reserves for this field are based on porosity, yield per acre and bottom hole pressure, all accurately determined. If this field could be produced at this rate it would be exhausted in less than ten days whereas this field under the present system of careful handling can be producing as much oil 10 years from now as it is today.

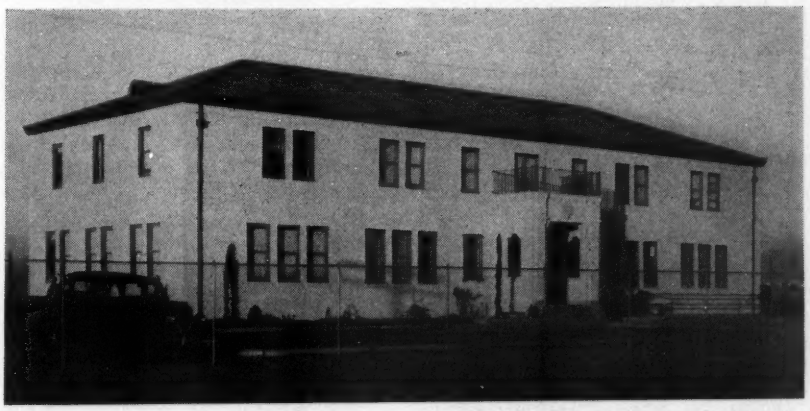
Fields like East Texas are not being discovered every year or even every five years, and although there may be other fields as good or in the same class as yet uncovered, it would be absurd to count on anything for which there is no evidence.

Many good new fields are still to be discovered in Texas, Oklahoma, Kansas, Louisiana and Arkansas. Deep drilling will be highly productive in the central parts of Michigan and Illinois basins from horizons as yet unproductive. States as yet unproductive, such as Iowa, Nebraska, Idaho, Utah, and the Dakotas deserve a more careful study and may be expected to yield some commercial fields. Montana and Wyoming and Colorado will yield new fields as further intelligent prospecting progresses.

Wildcatting More Hazardous

However, in spite of the constant discovery of relatively small new ones, oil pools are getting harder to find as evidenced by the increasing percentage of dry holes. In Texas and Oklahoma the percentage has

Shell Moves Into New Bakersfield Headquarters



RECENTLY COMPLETED at a cost slightly in excess of $60,000, the Shell Oil Co. has moved its Bakersfield Production and Exploration Departments into new headquarters.

The office building comprises two stories and basement, covers 40 ft. by 105, is of wood frame construction, stucco finish and tile roof.

Modern indirect lighting is installed. Walls and ceiling are insulated with rockwool, and the building is equipped with up-to-the-minute air conditioning facilities comprising a combination heating and cooling unit.

The entire land involved comprises 20 acres, which was purchased by the company several years ago. Production superintendent of the Bakersfield division of Shell is Claude Peavy, who is now on a business visit in the east.

risen 30% in 20 years, and in California 40% in 30 years.

These increases are persistent in spite of the refinement in geological practice and philosophic reasoning and in spite of the addition of thousands of expert geologists to the staffs of the larger organizations and the greatly augmented program of geophysical prospecting.

This diminishing return can be somewhat retarded by improved methods of oil recovery, whereby we can bring to the surface more oil per acre of the oil now discovered than in the past.

Some fields profit by the water drive but this only applies to special conditions in certain limited areas and is so very expensive that it can be applied only to grades of oil which are already high priced.

Re-pressuring by gas, successful in many areas, cannot be applied in others, and is inexpensive only when the gas is not in demand as a fuel for industrial and domestic use.

Mining for oil will eventually be practiced in some areas, when the price has gone sky-high and oil must be recovered for lubrication purposes. It can never be taken seriously as a means of satisfying any large consumptive demand, because it takes from ten to fifty tons of oil-bearing sand to produce a barrel of crude oil.

Oil from Shale

Oil from oil shale cannot become an important substitute until Mid-Continent crude oil has reached a price of about $2.70 per barrel. This is true in spite of the fact that the states of Colorado, Wyoming, Idaho, and Utah possess thousands of square miles of territory underlain by 500 feet or more of minable oil shale, which will yield a barrel of oil from three tons of shale. The cost of mining, retorting, and refining alone will make that price necessary without taking into account the extra burden of amortizing the cost of the expensive plants to be installed before production from this source can become a significant factor.

Hydrogenation of coal appears to be a partial substitute, but can never be anything more than a supplementary aid. Proof of this lies in the fact that if all of the coal produced in any one of the last five years had been entirely used to produce gasoline by the hydrogenation process, it would have yielded less than 20% of the gasoline used in that year. Since, of course, we cannot divert any large part of the coal mined from its present usage, gasoline from coal offers quantitatively a sorry substitute.

Oil prices should rise within five years to a point where substitutes can begin to enter the production program, but the high price must exist for about five more years before industry will be assured to the point where the vast capital necessary to build mining, retorting, and refining plants will be released for that purpose.

Small Refiners First To Suffer

In the industry the first economic pressure will be on independent refineries, especially those which are not parts of integrated companies and who have no owned production. Next to suffer will be the independent producer. Proof of that lies in the fact that 93% of our present reserves are held by twenty integrated companies and sixteen of these companies now own in fee or hold under lease, 38,000,000 acres of our most likely wildcat lands.

The high priced gasoline which will come with declining production will halt the increased gasoline demand, chiefly through the increase of smaller low powered cars which will deliver higher gas mileage, and the increase of Diesel oil using engines. The encroachment of fuels from the petroleum substitutes will also gradually take up the slack when the actual decline takes effect.

Conclusions which are obvious are:

1. Our reserves are definitly limited and are now being rapidly depleted.

2. Our consumption is mounting to a point where it is nearly twice the amount of new discoveries.

3. Substitutes for gasoline while helpful are definitely inadequate, unless there is a rapid decline in demand.

4. Ownership of foreign oils is limited and unlikely to be increased.

5. Stable price and stable uniform supply cannot be assured without a definite program of stabilization.

Need For Stabilization

The need for stabilization in the whole mineral industry has been great for many years as evidenced that since 1890 when the Sherman Act became law, the population of the United States has barely doubled, whereas the value of our mineral resources has increased ten times. This in evidenced that our mineral industry is growing too fast. Someone has aptly said "Agriculture lives on its income while the mineral industry lives on its capital."

Production control has been for years a problem in the mineral industry and has resulted in a chronic over-capacity and unstabilized price structure of coal, copper, oil, iron, lead, and zinc.

As I have pointed out, the situation in oil is much more acute, because its future is definitely shorter than in other industrial minerals. Its need for stabilization is greater than any of the others. How is this to be accomplished? It is self-evident that our present inherited economic machinery is not effective.

Individualistic competition, of which we have been so proud, has stimulated production to the point where heavy losses have resulted to both producer and consumer. The use of material, capital, and labor have as yet not been blended satisfactorily into an efficient machine to serve this industry. Stabilization or industrial and economic coordination must be the next step.

We cannot advocate only the sparing use of our oil, or advocate saving what we have left for future generations, but we can plan a program to avoid in the future many losses common to our past performance.

A survey of requirements must be made by the industry itself and a scheme for a satisfactory program of production, protection and distribution which springs from wise guidance, and from planning and cooperation of controlling groups must be maintained, instead of the battle royal which we have witnessed up to date.

Who Will Stabilize Industry?

Who will control and stabilize the industry is one great problem. Whether it should be a force outside of the industry or one inside is a debatable subject.

In actual practice the umpire in a baseball game does not take part in the game, but he is indispensable because without him the game cannot go on. Thus it seems likely that the state or Federal governmental agencies are better fitted to umpire this controlling and stibilization program than would be the participants themselves.

Apart from the sensible engineering practices and economic laws which ordinary reasonable efficiency would require, there exists a need for important changes in the fundamental laws for oil and gas.

The law now in use was devised for another day and since change in recent years has come in industry, politics, and everything else which

affects us, it is only logical and certain that changes must be made in our oil and gas laws if the industry is to proceed without further fatal loss and waste.

Laws must be devised which will control oil and gas ratio and which control bottom hole pressures. Laws must be devised which will correct the present evil of necessary offset drilling in areas of flush production. Laws must be devised which will control wildcat drilling and the development of new pools resulting from that form of exploration. When such state laws are passed so as to best suit the needs of each individual area, stabilization will be best served by the development of oil pools as units.

If this is not done, competitive pools in which the independent producer is operating will soon be exhausted and much more quickly than in similar pools in which the acreage is held by two or three major companies operating under a unit program.

Independents Endangered

As this continues the independent producer will become completely eliminated, because of his lack of ability to cooperate with others.

Webster says that the word independent means "Not dependent; free; not subject to control by others; not relying on others; not subordinate; self-governing; sovereign; not contingent or conditioned; irrespective of others, each other or another."

This defined freedom from control and disregard for others, which seems to be a quality which the independent producer cherishes so highly, has been and will be the source of his downfall, unless he can see that association with others for a common good is going to be the only thing which can keep him in the oil and gas business.

As I have pointed out, nearly all of the present known reserves are held by a few major companies who also hold the bulk of the most likely wildcat acreage. This percentage is sure to increase in the future because the greater companies are building up larger and larger geological and geophysical staffs which are painstakingly searching the earth for likely looking areas.

Certainly now is the time for the independent to discard his more colorful role of the opportunist and take up instead the task of getting for his sphere of operations a revision of the fundamental oil and gas laws to conform with modern needs of stabilization.

The large major integrated company has already learned its lessons of cooperation, coordination, and unification, and the next lesson for the independent is to profit by the experience of such a company.

The major integrated company by virtue of its ability to unify with another major company needs these changes in basic laws far less than does the independent, because only by these changes and by unification will he be able to continue to exist.

Cooperation Brings Higher Yields

Cooperative development, producing, and marketing in some sort of a unit scheme brings about a higher yield of oil per acre by regulating pressures over the whole pool, preventing unnecessary water encroachment and waste of gas energy which will prevent early lifting costs. It saves greatly in development costs, eliminating offset wells, and makes well spacing a scientific problem, rather than a social one. Production can be regulated to fit the market demand of the particular area and makes for the most efficient recovery of the oil in relation to the market needs and price. Operations under unit control are more likely to have uniform engineering practice, and with fewer and better informed engineers, less damage is likely to be done to the pools by poorly handled wells.

This brief and sketchy analysis of conservation and stabilization is not a message for the major company because it knows most of it already, but it is a message for the independent. Maybe he also knows everything I have said, but if he does he doesn't show it by his actions, except in a relatively few cases.

Now is the time for him to study stabilization and how best to establish it.

■ ■ ■

John M. Alden, U. S. Geological Survey, formerly stationed at the Taft office, is now supervisor at Tulsa, and in that capacity will have supervision over all drilling and production on the lands of the Five Civilized Indian Tribes and over the marketing of their production. Secretary Ickes has just ordered this work transferred to the jurisdiction of the Tulsa office of the U. S. Geological Survey from that of the Muskogee Indian Agency which hitherto managed such matters. The change went into effect Nov. 1. The transfer covers 4000 acres of Indian lands and revenues amounting to $1,500,000 annually.

O. C. Field Absorbs Casmite Co. Operations

H. E. Everett

THE PHYSICAL ASSETS OF the Casmite Co., heretofore operated as a wholly owned subsidiary of the O. C. Field Gasoline Corp., have been absorbed into the O. C. Field Gasoline Corp., and will now be operated as a part of that organization.

The Casmite Corp. has been retained as a sales organization for the purpose of selling the asphalt products of the merged company.

H. E. Everett, sales manager for the old Casmite Co., has been made president of the new Casmite Corp.

A graduate of Stanford University, class of 1919, Mr. Everett was a member of the Fifth Regiment of Marines during the World War and has been identified with the oil industry in California for the past 16 years, chiefly in the oil well supply business.

■ ■ ■

Julian In Status Quo

Failure of Julian Oil & Royalties stockholders to support the movement financially has postponed the meeting which was expected to be held in Los Angeles this month or next to send a representative to the annual meeting at Oklahoma City with proxies sufficient to gain control, elect a California board of directors and move the principal offices to Los Angeles. Hope has not been abandoned, however, of a later meeting which may devise ways and means to remove the present control which is unsatisfactory to many of those interested.

Outline of Accounting For Natural Gas, Gasoline Divisions

By Gordon Campbell
General Petroleum Corporation

IN ACCOUNTING for natural gas, the Accounting Department should enter the picture at the well, or rather at the first point where gas is metered after leaving the well. The orifice meter chart should form the basic record of the Accounting Department, and the reading of these charts should be an Accounting Department function. Chart reading, where the number of charts warrants it, should be a specialized job as constant practice greatly increases the speed with which charts can be read. The method of determining factors to apply to charts is a straight mathematical calculation as outlined in California Natural Gasoline Association Bulletin No. TS-353, dated November 11, 1935, and so involved that it would not be advisable to discuss it at this point.

Wet Gas Measurement

The first charts with which we deal measure wet gas from the well. These charts are changed and read daily and the volumes accumulated into monthly totals. At the point where the wet gas enters the absorption plant a master meter is or should be installed. This measures wet gas to the plant. The difference between the total of all well charts and the wet gas to the plant is called "wet gas line loss." Tests are made at regular intervals, sometimes determined by contract stipulations or by company practice, to determine the natural gasoline content of the wet gas. There are several different tests used by the various companies, but for the purpose of this report, we will consider the 30# 32° charcoal test made in accordance with the procedure recommended by the California Natural Gasoline Association in their Bulletin No. TS-351, dated October 31, 1935, as the test to be used. The theoretical natural gasoline content is determined by applying the results of the 30# 32° charcoal test to the wet gas from the well and by totaling the theoretical content of gas from all the wells, the theoretical content of all the wet gas treated at the plant is determined. The actual production of the plant is ordinarily determined by taking the natural gasoline in storage at the close of the month, adding to it the deliveries of natural gasoline made during the month, and deducting natural gasoline in storage at the opening of the month. To determine the actual production from wet gas, the total plant production is reduced by the amount of natural gasoline recovered from absorber oil, loading rack vapors, or any other legitimate deduction for natural gasoline from sources other than field wet gas. The actual production of natural gasoline from wet gas so determined is prorated against the theoretical natural gasoline content of wet gas, and in this way the production from each well, lease, or other desired group is determined. The royalty rate is then applied to the actual gasoline production of each lease and the royalty gallons determined. In the case of royalty to be delivered in kind, the royalty gallons are credited to the account of the royalty holder. Royalty gasoline to be paid for in cash is valued at the company's posted price, a price fixed monthly by the company, Oil and Gas Journal price, or prices in accordance with contractural obligations or company procedure.

In company operated plants, the Gas Department is regarded as the plant operator and as such pays all royalties accuring out of plant production. Of the remaining corporation production, the Gas Department retains a sufficient share as compensation for extraction and credits the balance to the Production Department as original producer and owner of "Wet Gas to Plant".

All this information can well be developed on a columnar form. having the wells listed at the left side of the sheet and the columns headed at the top of the sheet—wet gas—content test—potential production—actual production, gallons and value—royalty rate—royalty gallons—price per gallon—value—Production Department proportion—Gas Department proportion of royalty. So much for natural gasoline.

Dry Gas Measurement

Dry gas delivered by the plant to the disposal system is metered out through one or more master meters. The difference between wet gas to the plant, per master meter, and dry gas to the disposal system, per master meter, is considered as shrinkage due to extraction. Dry gas delivered by the disposal system to various facilities is metered, individual meters being necessary wherever separate readings are required, such as dry gas to lease boilers, by leases, dry gas for recirculating wells, by wells, dry gas used as plant fuel such as water pump, boiler plant, compressor station, or other plant facilities, dry gas delivered to consumers or marketing companies, and dry gas blown to the atmosphere. The total of individual meters measuring dry gas is compared to the total master plant meter delivering dry gas to the disposal system and the difference is considered a dry gas line loss or gain. Plant fuel, shrinkage and wet and dry gas line losses are prorated back against the individual field wet gas metered volumes. Dry gas returned to the leases is set-up as a debit to the lease and residue dry gas is determined by deducting from the wet gas metered to the plant the lease's proportion of plant fuel shrinkage and line loss and dry gas returned to the lease for fuel or recirculating. The total of gas blown to the air is prorated against those leases having residue dry gas. The remainder constitutes sale or deliveries to leases using excess. Dry gas sales are valued according to contract prices and in the absence of a specific agreement, excess dry gas delivered to leases is valued at prices established by sales contracts. The royalty rate is applied against the value of dry gas sold and dry gas royalties due to leases are determined. In the case of dry gas royalties to be delivered in kind, the royalty rate is applied to the residue dry gas

and the figure thus obtained deducted from the residue dry gas before gas is wasted to the air or sold. The plant dry gas statement also lends itself well to a columnar form, wells being listed down the left hand column and the columns headed wet gas to plant—plant fuel—shrinkage and line loss—dry gas returned to lease—residue dry gas—dry gas royalty to be delivered in kind—dry gas available for sale—dry gas blown to the atmosphere—dry gas sold—value of dry gas sold—royalty rate—value of royalty.

Standardization Desirable

In some cases, it will be necessary to make an adjustment in the amount of dry gas prorated as plant fuel, shrinkage and line loss to individual leases where the contract maximums are low. This is usually made as a charge to the plant and a credit to lease sales. It is good practice to issue statements for each lease supplying gas to the plant. Such statements could well be standardized by all oil companies and should show sufficient information to enable any royalty holder to check the calculations as they affect his particular interest. A good form is a small statement with columns headed similar to the plant statement and provision at the bottom for plant totals. The information appearing on these individual lease statements comes entirely from the plant statement. The lease statements should also bear a notation as to the settlement price for the following month's royalty—thus affording those royalty interests which have the option of taking their royalty in cash or in kind an opportunity to exercise such option.

The portion of expense, if any, to be stood by royalty interests will, of course, be determined by the lease contract and will constitute a deduction from the amount of royalty due.

Variations

The foregoing is particularly concerned with accounting for natural gas and natural gasoline at own company absorption plants and from own company leases. Variations from the above will be necessitated by contract stipulations—for instance, natural gas produced by other companies may be treated on a royalty basis or an extraction charge may be made to the producing company.

In the case of own company natural gas treated at other company absorption plants, the amount received from such other company will ordinarily be considered as the gross proceeds upon which the lessors' royalties of the producing company are based. In those cases where royalty is taken by producing company in kind, such royalty will be valued in the same manner as natural gasoline produced by own company absorption plants, and royalty based on this value.

Royalties due the Government from natural gas or natural gasoline produced by Government leases will of necessity be computed in accordance with Government operating regulations.

Definite procedure along the above lines should be established and each lease contract or agreement should be studied to see that no provisions contained therein are violated by such regular procedure. Differences in contract provisions are so numerous that each would require a special study.

Expenses

The collection of expenses may be segregated into three or four major classifications:

Operating
Maintenance
Marketing
Other Charges

Operating expenses will comprise labor and supplies, company fuel and purchased power and fuel, process royalties, chemicals, etc.

Maintenance expenses will comprise maintenance labor and materials, purchased maintenance, etc.

Segregation can also be made for absorber oil, waste absorber oil recovered, and natural gasoline recovered from absorber oil. Many, if not all, companies are at variance in the matter of accounting for absorber oil and products recovered therefrom, so no attempt is being made in this paper to set a definite course. This, however, can well form the basis for discussion at the conclusion of this paper.

The marketing group of accounts may be split to show Delivery Expense and Salesman, and further subdivided to show purchased hauling, own company hauling, auto and traveling expenses, etc.

Other charges will indicate self-insurance and outside insurance, depreciation, amortization, taxes, abandonments of lands, leases and plant and equipment, uninsured losses and uncollectible accounts.

Charges made to the various expense classifications will be further prefixed by the plant and the process. For example—Los Angeles A-9100—may be used to designate Los Angelees Plant—Gas Gathering—Operating Labor.

Process expenses should be maintained for each plant somewhat as follows:

A. Gas Gathering
B. Compressor Station
C. Boiler Plant
D. Gasoline Extraction
E. Water Treating
F. General

Service systems, serving more than one plant and/or more than one department may be maintained such as

Gas R—Laboratory
Gas S—Meter Test
Gas T—Supervision

Distribution of laboratory expense can be made by first charging other department facilities or other companies an amount equal to the actual expense involved in performing some service, the remaining expense to be spread to the various plants on the basis of the number of tests made for each plant.

Distribution of Meter Test expense will be made to other department and/or other company facilities and to the various gas plants based on the number of meters involved.

Supervision expense may be spread to the various plants based on the total amount of operating and maintenance labor charged in the current period.

General and executive overhead can be charged to the various plants based on the total production of the various active plants.

Fixed Charges

Amortization of Purchased Contracts: One company may purchase a contract held by another company to treat gas produced from certain properties. This contract is purchased for a certain consideration and the amount of this consideration is amortized over the probable life of the contract based on a rate per gallon of natural gasoline extracted from wet gas produced by said properties.

Depletion: On properties producing nothing but natural gas, depletion is based on the rate per mcf determined by dividing the cost of the property by the estimated recoverable natural gas as determined by the Geological Department. In the case of properties producing both crude oil and natural gas, depletion is ordinarily based on the crude oil estimated as recoverable. However, some companies go to the

(Continued on Page 23)

WILDCAT

THE CHRISTMAS JINKS and Banquet presented each year as a fitting climax to the oil industry social season by the Wildcat Committee of the California Oil and Gas Association, will be held this year on Dec. 18.

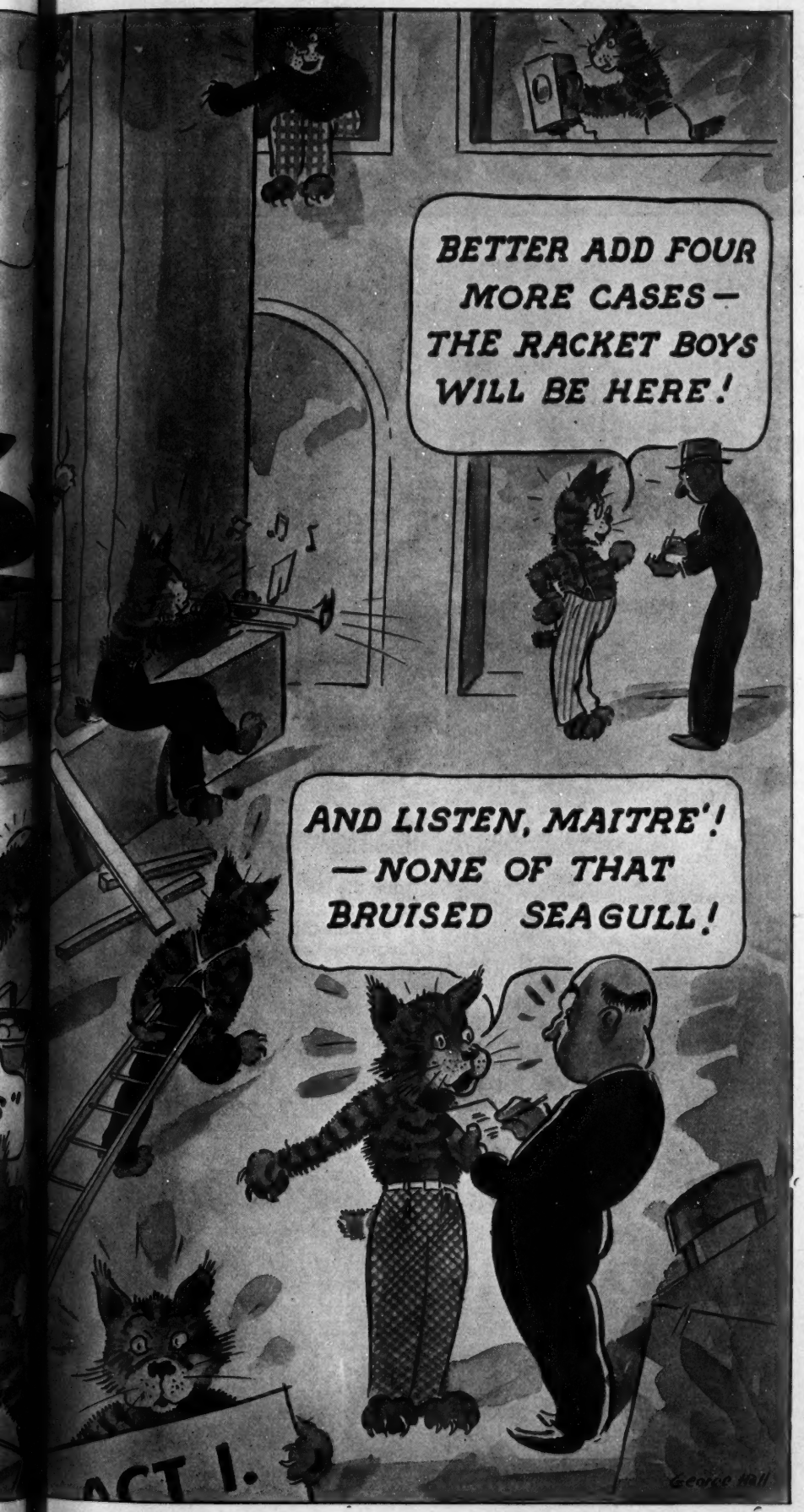
The place—Biltmore Bowl.

The time—7 o'clock.

The Wildcat Committee has been functioning since 1925, beginning in 1927 the series of plays whose satirical lines annually rip the oil industry apart.

Dana Hogan is the new chairman of the Wildcat Committee. He will be assisted by Frank Morgan, vice-chairman, and J. R. Pemberton, who will serve as treasurer.

A huge crowd is expected and the Wildcat Committee informs us that tickets are going fast, so make your reservations immediately.



JINKS

OFF IN THE WOODS throaty snarls and weird wailing sounds mark the spot where the Wildcats are concocting their latest brainstorm.

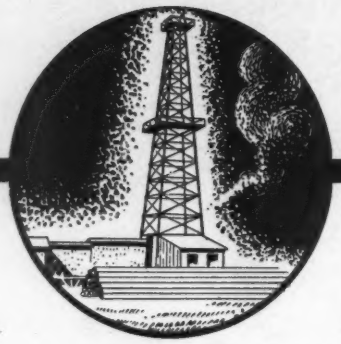
What is it about?

Who is it about?

That a play exists, that members of the cast come and go, is known. But only rumors are available to feed the flame of curiosity. An aura of mystery hovers over the entire affair.

Who murdered whom? And who buried the body? These and many other questions on everybody's tongue will be answered when the curtain goes up on the Wildcat's play.

Who dug up the body? Where is the body now? Only the Wildcats know. And tomorrow is their night to howl!



Production

Richfield El Segundo No. 1 Making 2240 Bbls.; Terminal 1 Making 1925

RICHFIELD'S El Segundo well, which came in last week, is producing 2240 bbls. per day, 28.5 gravity oil. According to the Richfield organization, the oil is clean, and is coming out of the hole at a temperature of 160 degrees, which is indicative of the presence of a good-sized pool. The total depth is 7435 ft., with casing cemented at 7322 ft., leaving 113 ft. of formation, in which is set 112 ft. of perforated pipe. Tubing pressure is 110 pounds, and casing pressure 1400.

Immediately adjoining the Richfield lease on the east, The Texas Co. has a 240-acre lease on the Johnson tract. The company will start a well on this property immediately after the first of the year, and on the 80-acre McCray lease, west of the Republic holdings in the area, Texas will also start drilling after Jan. 1. On the Varney lease, Caminol is setting foundation for an offset, 600 ft. from the Richfield well. Caminol has 10 acres under lease.

Republic is planning to start two wells on its lease in the area. The wells will be started immediately, on part of the company's more than 100-acre holdings.

Ohio Oil also has property in the area, and is drilling its second well.

Wilmington

General Petroleum's Terminal No. 1, which came in last week from a third sand, is flowing through a half-inch bean at the rate of 1225 bbls. of 20.4 gravity oil per day, with a 2% cut. Pressure on the tubing is 300 pounds, and on the casing 900 pounds.

The well was drilled to a total depth of 6814 ft., but has been plugged to 3625 ft. Present productive formation extends from the plugged depth up to 3122 ft., where a combination string was set.

General Petroleum's Patton No. 1 is drilling at 3500 ft. in shale and oil sand. The company' present expectations are to complete this well in the same zone from which Terminal No. 1 is now producing.

Geo. F. Getty, Inc. and Pacific Western have a 65-acre lease in the area, and Jones Community No. 1, their first test, has the rig up. The well is located about 1000 ft. northeast of the Patton No. 1, and if it is successful, the lease will be drilled up.

Gilmore has made a location for its Jaite No. 1.

Gauthier Oil Co. has the foundation in for its second well in the area. Its No. 1 is making 70 bbls. of 16 gravity oil per day.

Royalty Service Corp. has the rig up on sec. 5, 5-13, for its Community No. 1.

Selegna Oil Corp. has its No. 1 standing cemented at 3430, with the bottom of the hole at 3685 ft.

With Lupie No. 1 and No. 2 on production for 42 and 55 bbls. per day respectively, Sunset Oil has started its Lupie No. 3, and at present is fishing for drill pipe. The well was spudded shortly after the first of the month and bottom of the hole is at 1426 ft.

Twin Harbor Oil Co. is cleaning out its No. 1, on sec. 27, 4-13, at 1280 ft.

Basin Wildcats

Standard Oil Co. is drilling at 7828 ft. with some stringers of oil in its Badger No. 1, in the Alondra Park area. The well is on sec. 22, 3-14.

Universal Oil Co. is drilling in shale, with streaks of gray sand, at 6112 ft. in its Carrell No. 1 on sec. 36, 3-14.

In the Montebello area, Honolulu has the foundation in for its first core hole test of the area. It is on sec. 14, 2-12. The company is rigging up its first test in the Puente area. The well is on sec. 15, 2-10.

Superior Oil is down 9332 ft. in its Fox Hills or Inglewood Extension well on sec. 25, 2-15. The formation at that depth is sand and shale.

G. G. Willis, who recently took over the Shell well on the flood control lands west of Long Beach, is redrilling the well at 2450 ft.

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Wilshire To Drill New Prospect Near Bakersfield

WILSHIRE OIL CO. is expected to be drilling within another 60 days on a new structure mapped immediately south of the city limits of Bakersfield where the company has acquired some 400 acres extending from the location of the gas wells in the neighborhood of Oak Street and Brundage Lane brought in but abandoned some years ago by Western Gulf and a point near the southeast limit of Fruitvale. A fault has been traced between these points running east and west with a slight trend north and south just outside the southwest city limits. To the south of the fault Harry Sankey of Los Angeles and Harold Bauer of Bakerfield have assembled a block of some 400 acres which Wilshire has taken over. Commercial results are hoped for between 3500 and 4000 ft.

■ ■ ■

Coffee Canyon Well Starts

C. C. M. O. has started drilling an outpost well in Coffee Canyon, sec. 6, 28-29. Electric power will be used.

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Torrance Site Graded

J. E. O'Donnell has a location graded for a well at Torrance. He has five acres under lease.

Associated Completes Reward No. 5; Standard Rosedale Well Stands Cemented

SAN JOAQUIN VALLEY drilling operations have not developed anything startling during the past week, with the possible exception of Associated's completion of Reward No. 5, North Belridge, which is making 1872 bbls. daily, 30.2 gravity. There is a pressure of 800 pounds on the casing, and 125 on the tubing. The well was completed in the Wagonwheel, and has 657 ft. of formation, with the bottom at 9022 ft.

Standard Oil Co.'s KCL No. 11-1, on sec. 19, 29-26, has cemented 9-inch casing at 7740 ft., with the bottom of the hole at 7807, and is standing. The 67 ft. of formation is the one that last week became the first real showing of oil that any company, except Shell, has had in any of the wells drilled as a result of Shell's discovery of 10 Sections. The Standard well is not in the 10 Sections area, and is considered to be on an entirely different structure. It is approximately seven miles north of 10 Sections, in the Rosedale or Rio Bravo district.

The Associated's KCL No. 1, on sec. 30, 29-25, is down 7683 ft., and is preparing to run a string of 8-inch casing, after having cleaned out to 7350 ft.

10 Sections

Shell is down 6505 in its KCL 34, on sec. 29, 30-26, in sand and shale.

Standard's KCL 9-1, on sec. 34, 30-26, is down 8415 ft. in gray sand, and KCL 10-1, on sec. 20, 30-26 is down 8783 ft., in shale. This latter is the well that went through 20 ft. of formation carrying oil showings, but has not yet tested the zone, if it ever is to be tested. The showings were encountered below 7500 ft., and probably would not warrant a test, it being highly doubtful if 20 ft. of formation is commercially productive at that depth.

Superior Oil Co., drilling its KCL 8 in sec. 22, 30-26, is down 8100 ft., in hard gray shale, with nothing of importance uncovered to date.

The latest entrant in the area, British American, Inc., is in sandy shale at approximately 700 ft. in its Smith 1A on sec. 21, 31-27.

Mountain View

Buffalo Oil Co. has made a location for its No. 6, on sec. 19, 30-29, and is drilling its No. 5, on the same section, at 975 ft. The latter well was spudded in during the first of the present month.

General Petroleum is building a rig for its Freeport No. 1, on sec. 19, 30-29.

Hancock Oil is about ready to complete its Miller No. 10, which has received the state OK on its water shut off at 5123 ft.

Hillman-Long is rigging up its Whittekin No. 1, on sec. 34, 30-20.

Sheldon Oil Co. has made a location for its Nichols Community No. 1, on sec. 19, 30-29.

Standard is rigging up its Mabry No. 3, on sec. 18, 30-29.

Wood-Callahan Oil Co. has its Mullaney No. 2 on sec. 24, 30-28 standing cemented at 5084 ft., with the bottom at 5261 ft.

Valley Wildcats

The Den Petroleum Co. is drilling at 1825 ft. in hard sand in its No. 1 on sec. 20, 25-19.

Doyle Petroleum has plugged its Quinn No. 1, on sec. 15, 25-27, in the Jasmine area, to 2882 ft., and is bailing. The original bottom of the hole is at 2956 ft.

In the Lerdo district, the Arkelo Oil Co. has reached 6886 ft. in brown shale in its No. 1, on sec. 23, 28-26.

On sec. 8, 27-24, near Wasco, Continental is redrilling its KCL A-1 at 5500 ft., with the original bottom at 6500 ft.

The Texas Humboldt Well Encouraging

PROSPECTS FOR OIL being found in Humboldt County appear bright at the present time due to the deep test The Texas Co. is now drilling on sec. 22, 3n-1w, Eureka No. 2. Eureka No. 1, drilled on a separate structure to the west of the present drilling well, encountered some showings of oil but none in quantities that were commercially important.

Eureka No. 2 is being drilled on the Tomkins Hills structure and at the present time is down 6800 ft., drilling in shale. Large quantities of gas were encountered at the 4000 to 5000-ft. level, and if no oil sand is encountered below, it is believed that the company can bring in a gas well from the upper formation. Due to the fact that the first well was drilled on what is known as the Table Bluff structure, while the new well is located on Tomkins Hills, it is impossible to say at just what level the oil sand may be encountered, but it is believed that if such a sand exists it will be found immediately below the 6800-ft. level.

Of interest to geologists is the fact that this is the first area in northern California in which the Pliocene has been found. The Cretaceous is more commonly associated with this region.

Continuous coring has been the practice of The Texas Co. on the well and a great deal of geological information may be expected to result from the drilling of this deep test.

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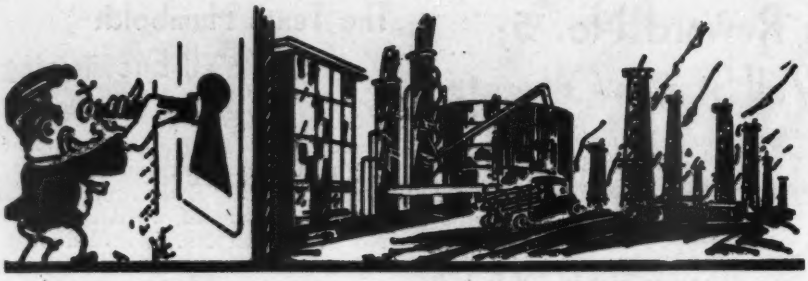


Right in the beginning this week we are going to spike a very disturbing rumor. A story has been going around to the effect that Bill Ackerman returned from the A. P. I. convention with a bad case of jaundice. It's all hokum sauce. Bill merely came back wearing a yellow shirt.

■ ■

Reminding us that while field men normally develop a healthy tan, there is an occasional one who turns out to be just a robust yeller—particularly at a football game.

■ ■

And when some sage quoted that old adage about health being wealth, Gene Hill piped up, "Yeah, but did you ever hear of anybody buying a Chevrolet with a pair of rosy cheeks?"

■ ■

Now that the opening of Santa Anita is imminent, Harry Lee again points out that the horse is man's best friend, but rarely shows it when you bet on him.

■ ■

Personally, we never had much luck in this racing business. Every time we bet on a horse, the owner scratches him, and the only time we ever bet on a dog, he stopped half way up the course and scratched himself.

■ ■

Which shows that Mac McKinnon was dead right when he said, "The guy who can smile when things go wrong is the bookmaker who takes your bet."

■ ■

And one of the surest signs of recovery, according to Dick Shinn, is that people are beginning to take the bills out of the envelopes again.

■ ■

"Hi, there!", says Bill Roper to the rousty who had been gone for some time, "Where have you been keeping yourself?" To which the rousty replied, "And what makes you think I've been keeping myself?"

■ ■

Bo Thibodeaux, the well known divot lofter, is of the opinion that the air in California is kept warm by the golf stream.

■ ■

And George Thompson is quite sure that when the supply of petroleum is finally exhausted and the wells are all abandoned, the land will revert to its original wild state, and become golf courses.

■ ■

Now, incidentally, that prosperity is definitely with us again, Roy Hornadge laments the fact that some of the petroleum boys are fooling around so much with their work their golf is going all to pieces.

■ ■

Did you know, also, that a little oil field church has posted a notice announcing that the preacher will deliver a special sermon for oil workers on the first snowy Sunday?

■ ■

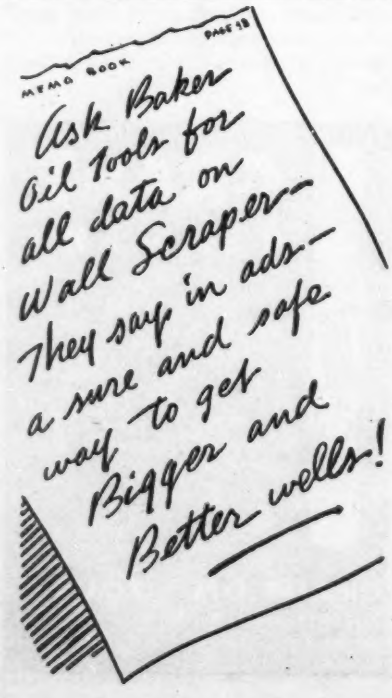
"Did you ask the boss for an increase?" inquired the rousty's wife, and the latter replied, "No." "Well, where did you get the black eye?" she demanded.

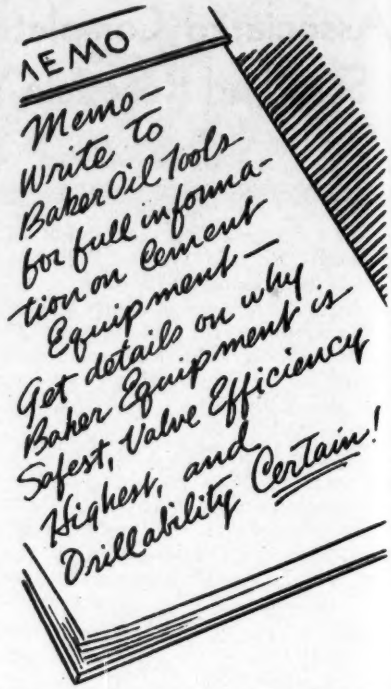
■ ■

Which recalls Abe Rush's old story of the oil man and his wife who lived a fast and furious life. He was fast, and she was furious.

■ ■

And Luther Hale's yarn about the young pipe liner who quarrelled with his girl, and then decided to kiss and make up. She got the kiss, and he got the make-up.


MEMO BOOK
PAGE 13
Ask Baker Oil Tools for all data on Wall Scraper— They say in ads— a sure and safe way to get Bigger and Better wells!


MEMO
Memo— Write to Baker Oil Tools for full information on Cement Equipment— Get details on why Baker Equipment is Safest, Value Efficiency Highest, and Drillability Certain!

Earl Stillwell now tells of receiving an application from a lad who was formerly a worm hole borer in an antique furniture factory.

■ ■

And after occupying a watchman's shack at the tank farm for several years, a certain individual who shall be nameless, declares that he now knows how it feels to be a Siamese twin.

■ ■

Fred Vaile advises us not to be too jubilant over business improvment. "Red ink manufacturers," he says, "are suffering one of the worst depressions in years."

■ ■

After all there are two sides to every question—your own and your wife's.

■ ■

And while it is true that a rich man can never enter the Kingdom of Heaven, Bill Saul reminds us that he will have no trouble getting on the board of trustees at the church.

■ ■

Bill Hay and Ralph Rosborough had very little trouble on their recent trailer trip, but were obliged to rough it for one night in a hotel.

■ ■

On the subject of travel, Warren Carey says there is no place like the air lines for good plane cooking.

■ ■

And the very last word in airplanes is "jump."

■ ■

In conclusion, while we haven't yet become really enthusiastic about flying, we often wonder who's going to be the first to double cross the Pacific.—R. S.

Dearborn's Success Starts New Drilling Campaign

DEARBORN OIL Co.'s remarkable success in extending the Torrance producing area has started a campaign of active drilling which should be well underway by Jan. 1. Killingsworth Bros. are already repairing the rig to clean out and deepen their Cunningham No. 2 Fullerton Oil Co. will immediately deepen Cotton No. 4. C. C. M. O. is expected to do some offsetting at an early date.

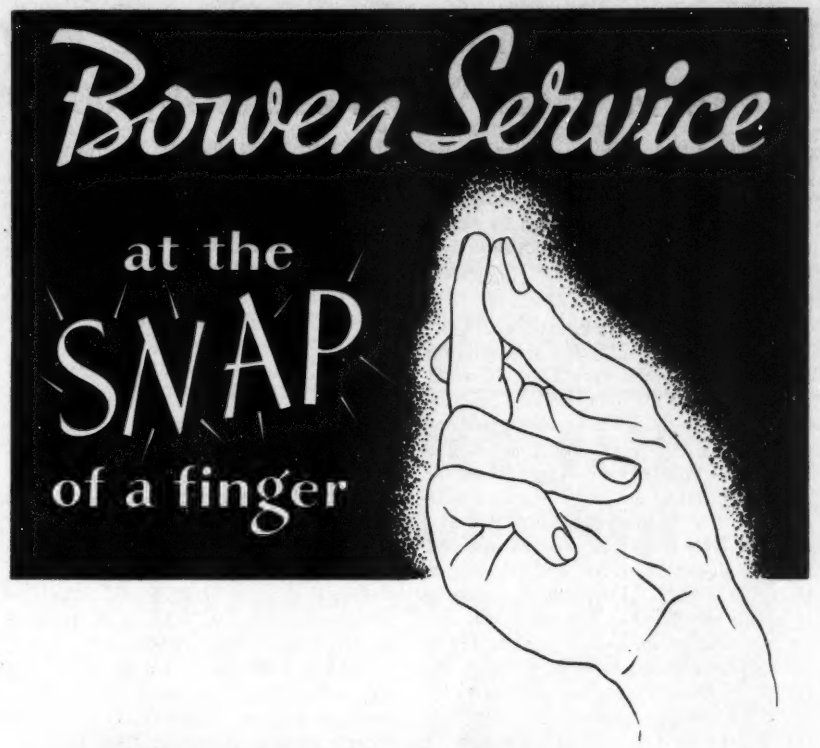
Signal Petroleum of Long Beach, a land owning company with acreage leased to operators in the Long Beach field, has 20 acres adjoining Dearborn, and will drill a new well within 60 days. C. R. Butler, president of Dearborn, is an officer of Signal, and the companies occupy the same office. This will be the first drilling Signal has attempted in California since it brought in the first well spudded in on Signal Hill. The Torrance well will be only the beginning of its 1937 activities, for it has holdings to drill shortly in Midway-Sunset adjoining some of the Dunlap holdings. Signal also has 1500 acres at Green River, Utah, where, with two associates, it will start a wildcat well within 60 days. The territory is considered 4000-ft. ground. Mr. Butler will have charge of all the operations and Signal operations. He will spud in within a week on the contract wildcat he will drill for Honolulu at Puente.

Dearborn's well at Torrance has settled down to 300 bbls. per day, 5% cut when last reported, with 150,000 c.f. of natural gas, carrying three gallons of gasoline per mcf. The company has 50 acres under lease. Besides Mr. Butler, the officers are: T. M. Dearborn, San Francisco auto dealer, vice-president; his brother D. L. Dearborn; W. A. Webber, secretary-treasurer.

■ ■ ■

Axelson Opens Store

The Axelson Manufacturing Co. is now occupying new quarters in Huntington Beach. The new store is at the corner of Fifth and Walnut. According to Alvin Zwerneman, California sales manager of the Axelson organization, the new store will include enhanced facilities for handling pumps, sucker rods, repairs and supplies of pumping equipment of every description. H. F. Donley will be in charge.



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Write for new 1937 Bowen Catalog.

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VALLEY FISHING TOOL CO.

HUNTINGTON BEACH — LONG BEACH
SANTA FE SPRINGS — VENTURA
BAKERSFIELD — AVENAL

Santa Maria Still In Spotlight; Ventura Ave. Well Reaches 10,000 Ft.

SANTA MARIA held the spotlight in the Coast sector during the past week, challenged only by Ventura Avenue's first well to reach the 10,000-ft. mark, Associated Oil Co.'s McGonigle No. 12.

Santa Maria

Union Oil Co. has completed Vincent No. 1 at 4211 ft. and placed the well on production Dec. 10 with an initial flow of 3700 bbls. The tubing pressure is 80 lbs., the pressure on the casing 500. Estimated gas output is 500,000 cf. The oil is 15 gravity cutting 1.3%. This well was drilled to offset Hancock-Bush Brown No. 1 which was completed a few weeks ago for a little more than 2000 bbls. Drilling equipment is being installed in Union's Mahoney No. 2, a second offset to the Hancock Brown well, and the rig is up for a third offset, Adam No. 2. Concrete is being poured for Moretti No. 2, one and a half miles north of Vincent No. 1. Moretti No. 2 will offset A. N. Macrate's well. With the exception of Vincent No. 1, all of the eight wells Union has completed in Santa Maria are shut in.

The Apache Oil Co.'s Carreaga No. 1, sec. 31, 9-33, has a plug at 4360 and is preparing to clean out and test formations. A location for Carreaga No. 2 has been made on sec. 7, 9-33.

E. H. Moore, Inc.'s Union Sugar No. A1 is redrilling at 4275 ft.

A. N. Macrate spudded in Fernandez No. 1 on Dec. 11, on sec. 26, 10-34.

The O. C. Field Gasoline Corp.'s White No. 1 is standing idle at 5465 ft., with 10-inch casing set at 2800 ft. Echo Oil Co. is standing idle at 2962 ft. with 10-inch casing set at 1635 ft.

Houk No. 1, drilled by W. D. Shaffer on sec. 9, 9-33, was drilling in sand and shale at 950 ft.

On sec. 30, 10-33, R. R. Bush Oil Co. is drilling in hard gray shale with traces of oil at 5220 ft. The 8-inch casing is set at 2865 ft.

Shiells Canyon

Home Ranch No. 4 has been completed by Petroleum Securities for 240 bbls. of 28 gravity oil cutting 0.1%, with 600,000 cf of gas flowing through a 12/64-inch bean. The well is bottomed at 3235 ft. with 11-inch casing set at 3185.

Ventura Avenue

With Associated Oil Co.'s McGonigle No. 12 below 10,000 ft., considerable speculation is abroad concerning the outcome of this, the deepest test in Ventura Avenue, The well is bottomed at 10,007 ft., and on Monday the company was running pipe preparatory to going ahead.

J. J. Munding No. 1 is drilling at 1110 ft. through brown shale with some showings of oil. This well is located on sec. 22, 4-22.

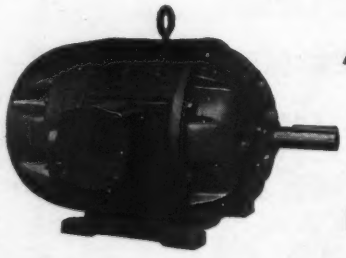
St. Louis Oil Co.'s Pirie No. 3 is rigging up on sec. 13, 4-24.

Other Coast Wells

In Oxnard, Vaca Oil Exploration Co., Inc., is swabbing California Lands No. 1 at 2822 ft. The 8⅝-inch casing is set at 1865 ft. This well is on sec. 6, 1-21.

Continental Oil Co.'s wildcat on Red Mountain, Casitas No. 1, is in hard sand at 3241 ft. The 13⅜ was set at 335 ft. Grubb No. 6, recently spudded in by Continental, on sec. 24, 3-24, was drilling through sandy shale at 1153 ft.

For Hazardous Jobs in Refineries Use
G-E EXPLOSION-PROOF MOTORS



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General Electric offers you a complete line of explosion-proof motors and control from which it is easy to select the combination that will give you the most dependable service at the lowest cost.

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Prospect Well In Bavaria Gets "Smells;" Will Aid In Selecting Future Drilling Sites

AFTER drilling to 5840 ft. and getting no commercial oil or gas, the Bavarian Oil & Gas Co., owned jointly by the Socony-Vacuum Oil Co. and the Hammond interests of New York, has abandoned its first well in the Danube Basin near Munich, Bavaria. It is preparing to start again at another location. This first well was drilled more with the view of getting the geological column than of getting commercial oil and gas. In the first objective the well was successful.

So said Carl Strehle, foreign manager of the Hammond interests, who left for New York last Friday after spending several weeks in California. As Mr. Strehle put it, the first well had "smells" of oil and gas and will aid in selecting future sites. As the company's concession covers million of acres—the entire Basin of the Danube in Germany, with Munich, the Bavarian capital right in the center thereof—there is a great area to be prospected and many wells may be drilled before it is proved or disproved.

Existence of oil and gas in Bavaria has been known for centuries, for there are large seepages, the most notable at Tegernsee, a town of some importance, located about 35 miles southeast of Munich and near the Austro-German boundary line. A monastery was located here and the monks gathered the oil, bottled and sold it for medicinal purposes. Notwithstanding this plain indication of the presence of oil and gas, there has never been an effort made to develop it. A region with similar evidences of oil, and situated, as this district is, close to big centers of population and industry, if within the United States, would probably have been developed 30 years or more ago. At least some attempts at development would almost certainly have been made.

Bavarian oil will be found in lime which is the formation of the country, as in Pennsylvania and many American oil fields, outside of California. It is apt to be a paraffin base and of high gravity.

Geophysical exploration and geological studies on a vast scale preceeded the first drilling. The work was in charge of Dr. Barton and J. L. Thomas. both Americans and noted geophysicists. The results have shown conditions to be favorable to substantial commercial production.

Other oil interests of the Hammonds are the Seaboard operations in Mexico and Venezuela. The latter are now held jointly with Standard Oil of New Jersey and a well will be drilled next year in the Pedernales district. A few years ago, the Hammond interests drilled three wells in the Three Rivers district, Quebec, Canada. There was some gas found in the Trenton rock lime but the lime formation was so compact that the gas obtained was not worth the expense of drilling, although a little gas has been produced and used locally. The last well drilled by the Hammonds went to 6000 ft. and found gold at the bottom, but gold is being found at "grass roots" in Quebec and it will be a long time before any one will go 6000 ft. for it.

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The McCullough Gun Perforator shoots hardened steel projectiles **through** one or more strings of casing in the well and out into the formation. Its unusual perforating ability is proved by its successful performance of hundreds of jobs under all conditions.

McCullough Gun Perforators are operated by experienced service men well qualified to accomplish the work with speed and economy. Call at any time, day or night, for service in any California field.

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- **All shots are fired simultaneously, perforating five feet of casing on each run.**
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- **Special closely spaced 1, 2 and 4 shot Guns are available for special cement jobs.**
- **EXTRA POWERFUL SINGLE-SHOT GUNS FOR PERFORATING SEVERAL STRINGS OF CASING AND EXTREME THICKNESSES OF CEMENT, ALSO SUPPLIED.**
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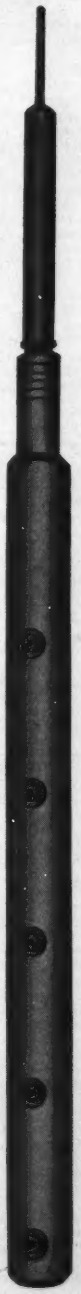


Drilling Report

Oil field operations reported during the week ended Dec. 5, show 23 notices to drill new wells filed, as compared with 13 during the previous week. 2 were in Huntington Beach, 1 in Whittier, 2 in Richfield, 1 in Los Angeles county, 2 in Rincon, 11 in Kern county, 3 in Kettleman North Dome, and 1 in Napa county. Total new wells this year, 1023, as compared with 943 at the same date last year.

Deepening or redrilling jobs this week numbered 28, as compared with 13. Total to date this year, 755; total to same date last year, 753.

Abandonments numbered 11, as compared with 3. Total to date, 434; to same date last year, 389.

NEW WELLS

	Well No.	S.	T.	R.
Los Angeles County				
Ohio Oil Co.				
Gough	2	7	3 S	14 W
Huntington Beach				
Pan Coast Oil Co.	1	2	6 S	11 W
Hammil Oil Corp.				
Lewis	2A	10	6 S	11 W
Whittier				
N. H. Cayton	1	22	2 S	11 W
Richfield				
Union Oil Co.				
Chapman	39 and 40	29	3 S	9 W
Rincon				
General Petroleum Corp.				
Ferguson	5	7	3 N	24 W
Continental Oil Co.				
Grubb	6	24	3 N	24 W
Lost Hills				
Standard Oil Co.				
United	2	2	26 S	20 E
Midway				
R. McGray	2	22	32 S	23 E
Standard Oil Co.	53	33	32 S	24 E
Sunset				
Five Points Petroleum Corp.				
Lease Two	3	18	11 N	23 W
Oil Producers, Inc.	1	7	11 N	23 W
Devils Den				
Long and Associates	1	20	25 S	19 E
Poso Creek				
Standard Oil Co.	2	9	28 S	27 E
Mt. Poso				
Transit Oil Co.				
Transit Glide	1	33	27 S	28 E
Fruitvale				
Paul V. Kelley				
Greely	1	23	29 S	27 E
Round Mountain				
C. C. M. O. Co.	7	6	28 S	29 E
Mountain View				
Hillman-Long, Inc.				
Whittekin	1	34	30 S	29 E
Kettleman North Dome				
Kenda	65	28	21 S	17 E
Kenda	32	34	21 S	17 E
Standard Oil Co.	8	19	21 S	17 E
Napa County				
Lincoln & Kuhns	3	29	8 N	3 W

DEEPEN OR REDRILL

Los Angeles County				
C. R. Butler	1	14	2 S	10 W
Brea-Olinda				
Birch Oil Co.	7	2	3 S	10 W
Fullerton Oil Co.	20	2	3 S	10 W
Wilmington				
Sunset Oil Co.				
Lupie	1	28	4 S	13 W
Santa Fe Springs				
The Texas Co.				
Baldwin	2	6	3 S	11 W
George F. Getty, Inc.				
S. F. S.	34	5	3 S	11 W
Union Oil Co.				
Alexander	33	6	3 S	11 W
Huntington Beach				
Union Oil Co.				
Copeland	17	35	5 S	11 W
Shell Oil Co.				
Davenport	6	2	6 S	11 W
Long Beach				
The Texas Co.				
Daly-Gerard	1	19	4 S	12 W
Torrance				
Fullerton Oil Co.				
Cotton	4	16	4 S	14 W
Richfield				
Union Oil Co.				
Coyle	3	29	3 S	9 W
Lost Hills				
Lincoln Petroleum Co.				
Lincoln Drilling	1	12	26 S	20 E
Midway				
Quality Oil Co.				
Turner	1	22	32 S	23 E
C. C. M. O. Co.	12	22	31 S	22 E
Elk Hills				
Standard Oil Co.				
Tupman	37	36	30 S	24 E
Mountain View				
Standard Oil Co.				
Calif. Lands Inc.	1	13	30 S	28 E
Shell Oil Co.				
Porter Two	3	22	30 S	29 E
Mt. Poso				
Petroleum Securities Co.				
Glide	7	21	27 S	28 E

ABANDON

Coyote Hills				
R. A. Rowan, E. S. Armstrong, & Jas. E. Babcock				
May	1	21	3 S	9 W
Long Beach				
J. R. Cannon	1	24	4 S	13 W
The Texas Co.				
Marine Fee	1	13	4 S	13 W
Conejo				
Adolph Camarillo	1	27	2 N	20 W
Adolph Camarillo	1	33	2 N	20 W
Alameda County				
Seaboard Oil Corp.				
Johnston	1	13	3 S	3 E
Midway				
Blanck & McDonald	1 and 3	32	31 S	23 E
Ten Section				
Ohio Oil Co.				
KCL-E	1	19	30 S	26 E
Round Mountain				
Round Mountain Oil Co.				
Jewett	1	19	28 S	29 E
Coalinga				
Associated Oil Co.	2	30	20 S	15 E

Oil Index Numbers Show October Decreases

OIL INDEX numbers of the California Oil and Gas Association indicating comparative operations of the California industry for October show decreases in most items. Crude oil production fell from 90.26% in September to 90.20% in October and total new supply rose from 91.05% to 91.37%. Domestic demand fell from 106.67% in September to 101.77% in October, total shipments fell from 84.55% to 62.63%, and total market demand fell from 99.27% to 88.56%. Total stocks on the last day of October had an index number of 84.46%, more by .03% than on the last day of September.

10-Month Figures

For the first 10 months of 1936, crude oil production was 7.63% more than for the same period of last year, total imports were 43.33% greater, and the total new supply was 8.21% greater. Crude run to stills was 10.60% more. Gasoline from natural gasoline was more by 5.13 per cent, straight-run gasoline production by 9.09%, and total gasoline and distillate production by 14.54%. Kerosene production was 22.05% less for the period, lubricants production 19.35% more, gas oil and diesel oil production 7.57% more, and fuel oil production 13.16% more. Domestic demand was greater by 8.47%, and total market demand was greater by 5.52%.

For the 10-month period, crude shipments were 19% less, natural gasoline shipments 26.96% less, fuel oil shipments 8.04% less, and asphalt shipments 14.52% less. Shipments of gasoline and engine distillate were 8.46% more, of kerosene 6.52% more, of lubricants 35.22% more, and of gas oil and diesel oil 24.39% more.

• California • Production

AVERAGE PRODUCTION

December 5, 1936 to December 11, 1936, Inclusive

	December Quota	Barrels Production
San Joaquin Valley		
Belridge—North	11,125	13,980
Belridge—South	1,975	1,909
Buena Vista	16,835	18,788
Coalinga—East	11,740	9,244
Coalinga—West	5,370	6,021
Coffee Canyon	4,825	4,602
Edison	5,290	5,183
Elk Hills	8,160	8,740
Fruitvale	7,930	9,199
Kern Front	10,090	10,341
Kern River	3,380	2,241
Kettleman Middle Dome	275	248
Kettleman North Dome	77,150	77,639
Lake View	3,170	12,649
Lost Hills	4,305	3,720
McKittrick	3,680	1,663
Midway-Maricopa	35,000	40,416
Mount Poso	15,720	17,799
Mountain View	21,305	21,481
Poso Creek	1,910	2,009
Round Mountain	7,020	7,213
Ten Section	695	984
Wheeler Ridge	340	367
Others	.....	.....
TOTAL	257,290	276,436
Coastal District		
Capitan	1,855	1,756
Elwood	10,940	10,413
Padre Canyon	440	452
Rincon	1,940	2,188
San Miguelito	1,155	1,537
Santa Barbara	1,030	941
Santa Maria	4,955	4,916
Santa Paula-Newhall	4,255	4,805
Ventura Avenue	29,980	35,109
Others	360	195
TOTAL	56,910	62,312
Los Angeles Basin		
Alamitos Heights	1,495	1,628
Brea-Olinda	7,975	8,461
Coyote—East	2,275	2,358
Coyote—West	7,870	8,387
Domingues	23,055	23,237
El Segundo	310	2,003
Huntington Beach—New	18,395	21,322
Huntington Beach—Old	13,515	16,022
Inglewood	13,020	13,464
Lawndale	80	81
Long Beach	59,805	64,609
Los Angeles	645	725
Montebello	6,325	6,830
Montebello Extension	2,095	2,638
Playa Del Rey	11,050	10,620
Potrero	290	272
Richfield	6,910	7,704
Rosecrans-Athens	1,990	2,300
Santa Fe Springs	41,300	45,548
Seal Beach	7,390	6,306
Torrance-Hermosa	5,600	6,378
Torrance Extension	1,825	2,130
Whittier	995	906
Others	630	1,308
TOTAL	234,840	255,237
STATE TOTAL	551,000	593,985

■ ■ ■

J. V. (Jim) MacDonald, manager of the Los Angeles branch of the Chain Belt Co., is in the east to help lay out plans for the company's activity in the coming year.

Huntington Beach Consults Lawyers

(Continued from Page 5)

and other restrictions. In the quite remote case that the people should ever allow the state or any company acting therefor to drill on the beach, the city might be able to demand compensation for the injury to its next-to-oil most valuable asset.

Reticent On Details

Naturally, the city authorities are reluctant to say much about the details of any plans they may have. First, such plans are more or less in a tentative state; second, it might be poor strategy to reveal too much in advance. However, the above covers a range of talk that is heard around the city of Huntington Beach today on the streets, in offices and in the local newspaper columns.

Drilling Permit Dead

Meanwhile all chance of further drilling by the Black Eagle Oil Co. on its tideland permit outside of the city limits has departed. This company drliled under a permit issued under the old tideland drilling law which held good despite the law's subsequent repeal. Two wells were drilled and redrilled in the face of endless obstacles, but they were not completed within the statutory time limit. This failure was admittedly due to causes absolutely beyond the company's control, such as the refusal of adjoining land owners to grant a right of way to the site, forcing supplies to be hauled over the beach at low tide, to litigation by the land owners questioning the extent of the state's title, and the drifting ashore of a wrecked barge.

Notwithstanding the expenditure of $160,000 upon the work the Superior Court overruled the questions raised by the defense and held the permit to have been forfeited. The case never went any further, although Roy Dolley, the company's attorney, was thoroughly convinced that the higher courts would reverse the judgment. Stockholders showed a lack of further interest and refused to pay for needed transcripts and other court costs so no appeal was taken and the time for filing an appeal is now past.

The only hope now appears to be the extremely remote possibility that, in the event legislation authorizes whipstock drilling, the Legislature might recognize the company's moral claims and extend to it a right to develop its former holdings from the uplands, provided it can then acquire a drill site.

Five Locations Staked

Cedar Oil Co. has staked five locations in the Kern River area. The first well will be drilled on the sw¼ sec. 8.

■ ■ ■

Sespe Well Starts

Calkan Oil Co. is planning to start its second well in the Sespe area on sec. 26, 5-20.

Triangle Starts Derrick

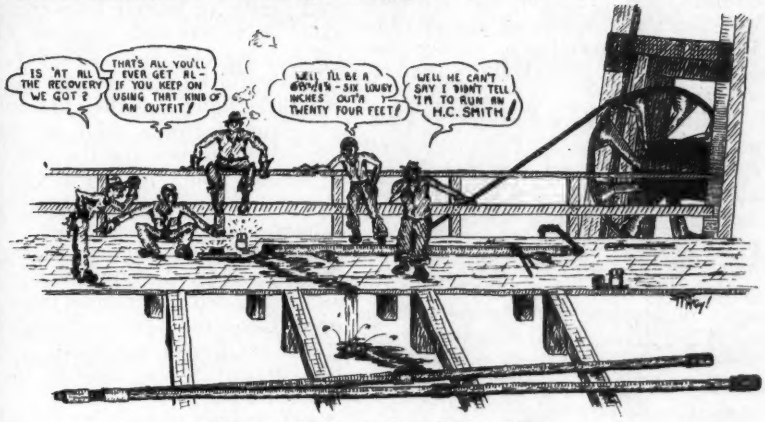
Triangle Oil & Refining Co. will start building a derrick within the next few days for a well about one-half mile south of the Otis Hoyt producer, del Rey.

■ ■ ■

Eastmont Plans Wildcat

Eastmont Oil Co., which is L. L. Hillman and Carl Long, is planning to drill a wildcat in Kern county, although the company will give out no details as to location or starting date as yet.

BELIEVE IT OR NOT . . . . . .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National Production In New Peak At 3,090,200 Daily During October

NATIONAL PRODUCTION during October is shown by the Bureau of Mines final report to have totaled 95,976,200 bbls., daily average 3,090,800, a gain of 57,800 per day over September. October's daily average was the highest to date and exceeded August, the previous high mark, by 22,800 bbls.

Preliminary national estimates for November, based upon A. P. I. scouting figures, show an approximate daily average of 3,028,000 bbls., which is 58,000 less than the October figures, indicating that the conservation program was able to do effective work during the month. However, November's production was still about 272,000 more than it was last year.

California's November production as shown by the A. P. I. scouting estimates averaged 580,000 bbls., about 100,000 less than a year ago and practically unchanged as compared with October. On the other hand, Texas produced approximately 100,000 bbls. more than a year ago, an average for the month of 1,154,250 bbls. Oklahoma produced 569,500 daily during November, about 110,000 more than during the same month last year.

November estimate of national production exceeded the allowable recomended by the Bureau of Mines by the small approximate daily total of 98,000 bbls. Detailed examination of the figures indicates that California exceeded its allowable assigned by the Bureau of Mines by about 28,000 per day, and that the other states, with the outstanding exception of Louisiana, more nearly conformed to the officially assigned quotas. Louisiana exceeded its quota by more than 30,000 bbls. daily, and produced 234,000 per day. Kansas and Texas each were about 10,000 bbls. over their quotas.

November Imports

November imports of all foreign oil, for the domestic market and in bond, the latter partly for re-export and partly for marine bunkering, totaled 4,246,000 bbls. against 4,671,000 during October. However, caution should be observed in comparing these figures as they are subject to many factors, such as delays caused by storms, and the difference of a few hours in the arrival and departure of sometimes a single tanker.

Separation of imports as regards destination for the domestice market and to bonded warehouses must wait upon the later figures compiled by the Bureau of Mines. Daily average for November was 169,433, for October 167,935.

California Oil in East

November receipts of California oil at East Coast ports totaled 230,000 bbls., October 726,000. In other words, October's receipts were more than three to one greater than November's. The decline was due almost entirely to a slow down in receipts of gasoline, which were 513,000 bbls. during October and only 80,000 during November. In other words, more than six times as much California gasoline reached East Coast ports during October as during November.

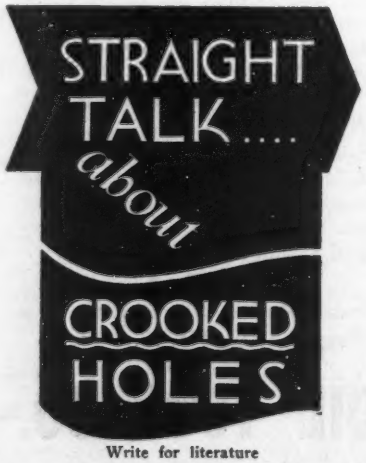
Increase in Gulf Coast production has captured the market for gasoline on the East Coast formerly held by California. October shipments from here totaled 116,000, November shipments 195,000. Both these figures are way below those of several months immediately preceding, which ran to above 600,000. Even October's substantial receipts were largely September shipments. About 26 days must be allowed for the trip. Receipts of California kerosene in the East were the same in October and November, 80,000 bbls. in each month. Receipts of fuel oil were 73,000 bbls. during October and 70,000 during November. Receipts of other oils during October came to 60,000 bbls., during November, none.

October Final Figures

Most of the gain in output in October was in Texas, where the daily average rose from 1,160,400 bbls. in September to 1,205,600 in October. The gain was closely related to a further increase in drilling activity, there being 862 wells completed in October, initial 447,400 bbls., compared with 787 wells, combined initial 373,800 in September. All the major districts of Texas increased their output and undoubtedly many areas reached new peaks in production. Production in California showed little change in October, daily average just under 580,000 bbls. Production in Oklahoma rose to 589,000 bbls. daily, the highest since August, 1933, principally from increased runs at Oklahoma City. Louisiana showed little change, although the October average of 233,000 was a new record. Rodessa declined for the second consecutive month but this loss was more than made up in the coastal fields. Kansas and New Mexico repeated their September production performances, the former showing a small decline, the latter establishing a new record.

Runs To Stills

Crude runs to stills declined but remained above the 3,000,000-bbl. mark at 3,005,000 daily. The decrease in runs in the face of increased production means that current production supplied a higher proportion of the demand in October than in September.



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Outline Of Accounting

(Continued from Page 11)

extent of estimating the recoverable content of both crude oil and natural gas for depletion purposes.

Depreciation: In accordance with the present attitude of the Federal Income Tax Bureau, depreciation is based upon the estimated service life of equipment. When such service life has been established, the annual depreciation is determined by dividing the original cost of the equipment by the number of years of service life. This is the general principle, and it is not within the scope of this paper to elaborate upon the method of establishing service lives, the development of composite rates for entire plants, or any of the myriad other complications which arise in the compilation of the necessary depreciation schedules.

Other Fixed Charges such as Abandonments—Lands, Leases and Equipment, Uninsured Loss, Uncollectible Accounts, Taxes, and Insurance are more or less self-explanatory and no elaboration is made in this paper of these items.

Liquid Propane-Butane

The considerable missionary work done by various companies to develop a market for liquid propane-butane and propane-butane mixtures is beginning to show results in increased demand for these products. The handling of liquid propane-butane in natural gasoline plants should be similar to the accounting for natural gasoline. Royalties are paid on this product based on sales value or an established price according to the policy of the company. These products are usually produced as needed and any storage of them at the close of the month need not be considered. In other words, it is more practical to consider deliveries as production.

Costing

The practice of various companies in the matter of costing natural gasoline, liquid propane-butane, and dry gas differs considerably. Some companies absorb all of the Production Department expense against the cost of crude oil in the case of leases producing both crude oil and natural gas. Other companies may assign a portion of the production expense to natural gas.

This is a brief outline of one method of costing where no production expense is absorbed in natural gas or its constituents, and each natural gasoline plant is costed separately. Purchased royalties are taken into account at actual cost. Other purchases are taken into account at actual cost and the total expense of the natural gasoline plant is taken in as the cost of company's net production. The total cost of these three items divided by the total of barrels produced gives us a per barrel cost of current production. Assuming that we are basing our cost on the first in, first out theory, and that the natural gasoline in storage at the gasoline plant at the close of the month is less than the current production for that month, the closing inventory will be priced at the per barrel rate developed as cost of current production. The cost of current production plus the cost of opening inventory, minus the cost of closing inventory gives us the cost of deliveries. The cost of dry gas sales would be the total of royalty purchases, other purchases, and lease expense where that lease produces only natural gas.

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Auto Accidents Take Toll Of Oil Workers

AUTO ACCIDENTS TOOK their toll in the petroleum industry last week when two men, widely acquainted in many California fields, were injured in two widely separated accidents.

Jack Porter, superintendent for the Gibson Oil Co., with headquarters in Taft, died last week from injuries incurred in an auto smashup. Funeral services were held last Tuesday. Mr. Porter's loss will be felt deeply by his many friends in the oil business.

The other accident, fortunately not fatal, resulted in the injury of H. F. Owen, of the Berry Holding Co., Surprise Oil Co., Big Ten Oil Co., and other oil corporations. While seriously injured, Mr. Owen's recovery and return to work is expected shortly.

■ ■ ■

Elliott To Drill

D. W. Elliott is planning to start a well at Wilmington. The location will be an offset to the Royalty Service Corp's. well.

Service Station Men Sue Dealers Association

THE GASOLINE station operators, recently sued by the Retail Petroleum Dealers' Association for an injunction to prevent them from selling gasoline below cost, last week filed cross-complaints asserting damages to their business and the lack of legal authority on the part of the association to file such charges.

Four dealers, Fred Niquett, Walter E. Pierce, M. H. Wallace and Gale Miller, filed a joint cross-complaint, while six other operators filed individual cross-complaints. These dealers, who handle no-brand or private-brand gasoline, charged members of the association with giving secret rebates in the form of prizes and free services.

The Retail Petroleum Dealers' Association is expected to answer the cross-complaints and it is believed that a place for the case will be made on the court calendar before long.

■ ■ ■

Fox Hills Well Starts

The Country Club Oil Co. is setting foundation for a wildcat near the Fox Hills Country Club in the Baldwin Hills area, a possible extension of Inglewood. The company has 280 acres under lease.

■ ■ ■

Re-Mine Foundation In

The Re-Mine Oil Co., headed by Ben Mun, has the foundation in for its second well at Huntington Beach. Site is near Edward St. and Ellis Ave.

■ ■ ■

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